

What Is Claimed Is:

1. A method for managing computer system resources, comprising the steps of:
 - (1) generating a first command control vector for a first input message, the first command control vector identifying a method object that contains one or more instructions for processing the first input message;
 - (2) generating a second command control vector associated with a second input message, the second command control vector identifying the same method object identified by the first command control vector, the method object containing one or more instructions for processing the second input message;
 - (3) providing a single copy of the method object for the first and second command control vectors; and
 - (4) processing the first and second input messages using the single copy of the method object.
2. The method according to claim 1, wherein step (1) comprises:
 - (a) identifying, in the first command control vector, a communication link from which the first input message is received;
 - (b) identifying, in the first command control vector, a destination device for which the first input message is intended;
 - (c) identifying the method object in first command control vector;
 - (d) identifying, in the first command control vector, a first current instruction of the method object, wherein the first current instruction is used to process the first input message.
3. The method according to claim 2, wherein step (2) comprises:

- 2 (a) identifying, in the second command control vector, a
3 communication link from which the second input message is
4 received;
5 (b) identifying, in the second command control vector, a destination
6 device for which the second input message is intended;
7 (c) identifying the same method object in second command control
8 vector; and
9 (d) identifying, in the second command control vector, a second
10 current instruction of the method object, wherein the second
11 current instruction is used to process the second input message.

1 4. The method of claim 3, wherein the first and second current
2 instruction are the same instruction and the same instruction
3 invokes a script, wherein step (4) comprises the step of:

- 4 (a) using a single copy of a script to process the first and second input
5 messages.

1 5. The method of claim 4, wherein step (4)(a) comprises:

- 2 (i) identifying current script instructions in the first and
3 second command control vectors for processing the first
4 and second input messages, respectively;
5 (ii) storing, in a first data object, data that is generated during
6 execution of the script for the first command control
7 vector; and
8 (iii) storing, in a second data object, data that is generated
9 during execution of the script for the second command
10 control vector.

1 6. The method according to claim 1, wherein step (4) comprises the
2 steps of:

- 3 (a) processing a number n of logical units of instructions for the first
4 command control vector;
5 (b) interrupting processing of the first command control vector; and
6 (c) processing a number m of logical units of instructions for the
7 second command control vector.

1 7. A system for managing computer system resources, comprising:
2 a command response manager that receives and processes input
3 messages, and that generates a separate command control vector
4 for each input message, wherein two or more of the command
5 control vectors identify a same method object that contains one or
6 more instructions for processing the associated input messages;
7 a command response manager queue that queues the command control
8 vectors, wherein said command response manager selects one of
9 the two or more command control vector from said command
10 response manager queue and processes the input message
11 associated with the selected command control vector by executing
12 one or more instructions in the method object.

1 8. The system of claim 7, further comprising:
2 a command response table that includes instructions embodying multiple
3 levels of intelligence for processing the input messages.

1 9. The system of claim 8, further comprising:
2 a script containing one or more instructions for processing input
3 messages, wherein said command control table includes a script
4 invocation that invokes said script when a command control
5 vector points to the script invocation; and
6 a data object, associated with a command control vector, that stores data
7 associated with execution of said script for the command control
8 vector.

10. The system of claim 7, further comprising:
a hybrid preemptive and cooperative multi-tasking control system that
processes a number n of logical units of instructions for a first
command control vector and processes a number m of logical
units of instructions for a second command control vector.

11. The system of claim 7, wherein each said command control vector
comprises:
a first field that stores data that identifies a communication link from
which the first input message is received;
a second field that stores data that identifies a destination device for
which the first input message is intended;
a third field that stores data that identifies a method object in first
command control vector, wherein the method object contains at
least one instruction for generating a response to the input
command; and
a fourth field that stores data that identifies a current instruction in the
method object that is used to process the input message.

12. The system of claim 11, further comprising:
a virtual object that includes a set of virtual instructions from the memory
object and a data segment that stores data associated with
execution of the virtual instructions, wherein said virtual
instructions can be invoked by an instruction in the method object,
wherein the invoking instruction is identified by the data in the
said fourth field

13. The system of claim 11, wherein the data in said fourth field
identifies an instruction that invokes a script that contains one or
more instructions that generate one or more logical responses to

the input command, wherein each said command control vector further comprises:
a fifth field that stores data that identifies an offset within the script for execution; and
a sixth field that stores data that identifies a data segment that stores data associated with execution of the script.

14. A computer program product for permitting a computer system to manage computer system resource, said computer program product comprising:
a computer usable medium having computer readable program code means embodied in said medium for causing an application program to execute on the computer graphics system, said computer readable program code means comprising:
a computer readable first program code means for causing the computer system to generate a first command control vector for a first input message, the first command control vector identifying a method object that contains one or more instructions for processing the first input message;
a computer readable second program code means for causing the computer system to generate a second command control vector associated with a second input message, the second command control vector identifying the same method object identified by the first command control vector, the method object containing one or more instructions for processing the second input message;
a computer readable third program code means for causing the computer system to process the first and second input messages using the single copy of the method object.